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1600

RAW SEQUENCE LISTING

DATE: 06/13/2003

PATENT APPLICATION: US/09/876,257D

TIME: 13:47:48

Input Set : A:\SEQUENCE LISTING Of application 09 876,257.txt

Output Set: N:\CRF4\06132003\I876257D.raw

2 <110> APPLICANT: Meloen, Robert H
 3 Oonk, Hendrica B
 5 <120> TITLE OF INVENTION: PEPTIDE, IMMUNOGENIC COMPOSITION AND VACCINE OR
 6 MEDICAL PREPARATION, A METHOD TO IMMUNISE ANIMALS
 7 AGAINST THE HORMONE LHRH, AND ANALOGS OF THE LHRH
 8 TANDEM REPEAT PEPTIDE AND THEIR USE AS VACCINE
 10 <130> FILE REFERENCE: 3516.2US
 12 <140> CURRENT APPLICATION NUMBER: US 09/876,257D
 13 <141> CURRENT FILING DATE: 2001-06-06
 15 <160> NUMBER OF SEQ ID NOS: 7
 16 <170> SOFTWARE: PatentIn version 3.1
 18 <210> SEQ ID NO: 1
 19 <211> LENGTH: 10
 20 <212> TYPE: PRT
 21 <213> ORGANISM: Unknown
 23 <220> FEATURE:
 24 <223> OTHER INFORMATION: Luteinising Hormone Releasing Hormone (LHRH) from the
 25 hypothalamus of an undisclosed mammal.
 27 <220> FEATURE:
 28 <221> NAME/KEY: misc_feature
 29 <222> LOCATION: (1)..(1)
 30 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid
 32 <220> FEATURE:
 33 <221> NAME/KEY: misc_feature
 34 <222> LOCATION: (10)..(10)
 35 <223> OTHER INFORMATION: X at position 10 = glycine amide
 37 <400> SEQUENCE: 1
 W--> 39 Xaa His Trp Ser Tyr Gly Leu Arg Pro Xaa
 40 1 5 10
 43 <210> SEQ ID NO: 2
 44 <211> LENGTH: 20
 45 <212> TYPE: PRT
 46 <213> ORGANISM: Artificial Sequence
 48 <220> FEATURE:
 49 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an
 50 undisclosed mammal.
 52 <220> FEATURE:
 53 <221> NAME/KEY: misc_feature
 54 <222> LOCATION: (1)..(1)
 55 <223> OTHER INFORMATION: X at position 1 = preferably pyroglutamic acid, but can
 56 also be glutamine having attached thereto a tail comprising one or
 57 more additional amino acids
 59 <220> FEATURE:

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60 <221> NAME/KEY: misc_feature
61 <222> LOCATION: (3)..(3)
62 <223> OTHER INFORMATION: X at position 3 = tryptophan or formylated tryptophan
64 <220> FEATURE:
65 <221> NAME/KEY: misc_feature
66 <222> LOCATION: (10)..(11)
67 <223> OTHER INFORMATION: The bond between amino acids 10 and 11 could comprise a
68     direct peptide bond between 10 and 11 or a spacer consisting
69     of one or more amino acids, a shorter or longer hydrocarbon
70     chain, or compound groups or molecules
72 <220> FEATURE:
73 <221> NAME/KEY: misc_feature
74 <222> LOCATION: (13)..(13)
75 <223> OTHER INFORMATION: X at position 13 = tryptophan or formylated tryptophan
77 <220> FEATURE:
78 <221> NAME/KEY: misc_feature
79 <222> LOCATION: (10)..(19)
80 <223> OTHER INFORMATION: The sequence comprising residues 10-19 may be repeated.
82 <220> FEATURE:
83 <221> NAME/KEY: misc_feature
84 <222> LOCATION: (20)..(20)
85 <223> OTHER INFORMATION: X at position 20 = either nothing or a tail comprising an
86     additional amino acid; preferably Cys, the C terminal cysteine
87     being added in connection with a possible coupling of the
88     peptide to a carrier protein.
90 <400> SEQUENCE: 2
W--> 92 Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Gln His Xaa Ser Tyr Gly
      93 1             5             10             15
      96 Leu Arg Pro Xaa
      97             20
100 <210> SEQ ID NO: 3
101 <211> LENGTH: 21
102 <212> TYPE: PRT
103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Vaccine against LHRH from the
107     hypothalamus of an undisclosed mammal.
109 <220> FEATURE:
110 <221> NAME/KEY: misc_feature
111 <222> LOCATION: (1)..(1)
112 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid
114 <220> FEATURE:
115 <221> NAME/KEY: misc_feature
116 <222> LOCATION: (3)..(3)
117 <223> OTHER INFORMATION: X at position 3 = tryptophan or N-formyl-Trp
119 <220> FEATURE:
120 <221> NAME/KEY: misc_feature
121 <222> LOCATION: (13)..(13)
122 <223> OTHER INFORMATION: X at position 13 = tryptophan or N-formyl-Trp

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124 <220> FEATURE:
125 <221> NAME/KEY: misc_feature
126 <222> LOCATION: (10)..(19)
127 <223> OTHER INFORMATION: The sequence comprising residues 10-19 may be repeated.
129 <400> SEQUENCE: 3
W--> 131 Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Gln His Xaa Ser Tyr Gly
      132 1             5             10             15
      135 Leu Arg Pro Gly Cys
      136             20
      139 <210> SEQ ID NO: 4
      140 <211> LENGTH: 21
      141 <212> TYPE: PRT
      142 <213> ORGANISM: Artificial Sequence
      144 <220> FEATURE:
      145 <223> OTHER INFORMATION: Vaccine against LHRH from the
      146       hypothalamus of an undisclosed mammal.
      148 <220> FEATURE:
      149 <221> NAME/KEY: misc_feature
      150 <222> LOCATION: (1)..(1)
      151 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid
      153 <220> FEATURE:
      154 <221> NAME/KEY: misc_feature
      155 <222> LOCATION: (6)..(6)
      156 <223> OTHER INFORMATION: X at position 6 = a possible replacement of glycine
      157       by a dextrorotatory amino acid which in addition contains a side
      158       chain by which the LHRH tandem unit can be coupled to a carrier
      159       compound.
      161 <220> FEATURE:
      162 <221> NAME/KEY: misc_feature
      163 <222> LOCATION: (16)..(16)
      164 <223> OTHER INFORMATION: X at position 16 = a possible replacement of
      165       glycine by a dextrorotatory amino acid which in addition contains a side chain
by which the LHRH tandem unit can be coupled to a carrier compound.
      167 <400> SEQUENCE: 4
W--> 169 Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly Gln His Trp Ser Tyr Xaa
      170 1             5             10             15
      173 Leu Arg Pro Gly Cys
      174             20
      177 <210> SEQ ID NO: 5
      178 <211> LENGTH: 11
      179 <212> TYPE: PRT
      180 <213> ORGANISM: Artificial Sequence
      182 <220> FEATURE:
      183 <223> OTHER INFORMATION: Vaccine against LHRH from the
      184       hypothalamus of an undisclosed mammal.
      186 <220> FEATURE:
      187 <221> NAME/KEY: misc_feature
      188 <222> LOCATION: (1)..(1)
      189 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid
      191 <220> FEATURE:

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192 <221> NAME/KEY: misc_feature
193 <222> LOCATION: (6)..(6)
194 <223> OTHER INFORMATION: X at position 6 = Gly or a dextrorotatory amino
195     acid containing a side chain that allows coupling to a carrier
196     compound.
198 <400> SEQUENCE: 5
W--> 200 Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly Cys
      201 1             5             10
204 <210> SEQ ID NO: 6
205 <211> LENGTH: 21
206 <212> TYPE: PRT
207 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: Vaccine against LHRH from the
211     hypothalamus of an undisclosed mammal.
213 <220> FEATURE:
214 <221> NAME/KEY: misc_feature
215 <222> LOCATION: (21)..(21)
216 <223> OTHER INFORMATION: X at position 21 = glycine amide
218 <220> FEATURE:
219 <221> NAME/KEY: misc_feature
220 <222> LOCATION: (1)..(21)
221 <223> OTHER INFORMATION: The initial cysteine of the peptide comprising
222     residues 1-21 is joined to the initial cysteine of an
223     identical peptide (residues 22-42) to form a dimer.
225 <400> SEQUENCE: 6
227 Cys Gln His Trp Ser Tyr Gly Leu Arg Pro Gly Gln His Trp Ser Tyr
228 1             5             10             15
W--> 231 Gly Leu Arg Pro Xaa
      232             20
235 <210> SEQ ID NO: 7
236 <211> LENGTH: 22
237 <212> TYPE: PRT
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Vaccine against LHRH from the
242     hypothalamus of an undisclosed mammal.
244 <220> FEATURE:
245 <221> NAME/KEY: misc_feature
246 <222> LOCATION: (7)..(7)
247 <223> OTHER INFORMATION: X at position 7 = a possible replacement of glycine
248     by a dextrorotatory amino acid which in addition contains a side
249     chain by which the LHRH tandem unit can be coupled to a carrier
250     compound.
252 <220> FEATURE:
253 <221> NAME/KEY: misc_feature
254 <222> LOCATION: (17)..(17)
255 <223> OTHER INFORMATION: X at position 17 = a possible replacement of
256     glycine by a dextrorotatory amino acid which in addition contains

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257 a side chain by which the LHRH tandem unit can be coupled to a
 258 carrier compound.
 260 <220> FEATURE:
 261 <221> NAME/KEY: misc_feature
 262 <222> LOCATION: (1)..(22)
 263 <223> OTHER INFORMATION: The initial cysteine of the peptide comprising
 264 residues 1-22 is joined to the initial cysteine of an identical peptide
 (residues
 265 1-44) to form a dimer.
 267 <400> SEQUENCE: 7
 W--> 269 Cys Gln His Trp Ser Tyr Xaa Leu Arg Pro Gly Gln His Trp Ser Tyr
 270 1 5 10 15
 273 Xaa Leu Arg Pro Gly Cys
 274 20

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/876,257D

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Input Set : A:\SEQUENCE LISTING 0f application 09 876,257.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. ~~1,10~~
Seq#:2; Xaa Pos. ~~1,3,13,20~~
Seq#:3; Xaa Pos. ~~1,8,13~~
Seq#:4; Xaa Pos. ~~1,6,16~~
Seq#:5; Xaa Pos. ~~1,6~~
Seq#:6; Xaa Pos. ~~21~~
Seq#:7; Xaa Pos. ~~7,17~~

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:4; Line(s) 165
Seq#:7; Line(s) 264